

Remarks

By this amendment, claims 1, 2, 8, 13, 14, 20, 25, 26, 28, 30 and 35-38 are amended. Reconsideration in view of the above amendments and the following remarks is respectfully requested.

In the Office action, claims 11, 12, 23 and 24 are rejected under 35 USC § 112, second paragraph, for alleged indefiniteness. Specifically, the Office action states that claims 11 and 23 lack antecedent basis for "said leads." With the amendments to claims 1 and 13, applicant respectfully submits that this term in claims 11 and 23 has proper antecedent basis, and therefore the rejection under § 112 should be withdrawn.

Claims 1-29, 31-33, 35-37 and 39 are rejected under 35 USC § 102(b) over EP 1 103 232 A1 (Bianchetti). This rejection is respectfully traversed.

Claim 1 is directed to an adapter for use in a handpiece system that includes a supply conduit and a medical instrument having an electrical operating element. The adapter comprises an adapter body and, as amended, adapter electrical leads. When the adapter is in place between the supply conduit and the medical instrument with the adapter electrical leads electrically connected to the supply conduit and to the medical instrument, electrical power is received by the adapter from the supply conduit and transmitted through the adapter to the operating element. The adapter is selectively switchable by a manual operation to move the adapter leads relative to the supply conduit to match a polarity of the electrical power transmitted from the supply conduit to a polarity required by the operating element.

Similarly, claim 13 recites that the adapter is selectively switchable by a manual operation to move the electrical leads of the adapter relative to the supply conduit. Claim 25 recites that the adapter is selectively switchable by a manual operation to move the electrical leads of the adapter relative to the supply contacts of the supply conduit. Claim 30 recites manually switching the switchable adapter into a second position different from said initial position to move the electrical leads of the adapter relative to the first part. Claim 35 recites that the adapter is selectively switchable by a manual operation to move the transmission leads

relative to the supply conduit. Claims 36 and 37 are each amended to recite that the adapter is selectively switchable by a manual operation to move the transmission leads relative to the supply conduit and supply hose, respectively. Claim 38 is amended to recite switching the switchable adapter into a second position different from said initial position to move the transmission leads relative to the first part.

Bianchetti does not disclose or even suggest an adapter with electrical leads where the adapter is selectively switchable by a manual operation to move the leads relative to the supply conduit. The Office action states that "[t]he adapter 101 is symmetrical with electrodes 106 on opposite sides from one another, consequently it is capable of being rotated manually 180° and inserted into handpiece 103 thereby switching the polarity of the adapter electrodes 106 in contact with the handpiece." The "adapter 101" is not a separate structure, but rather is a "connector" or terminal end of a conduit that supplies power to the handpiece. Therefore, any rotation of the connector 101 also rotates the conduit. Stated differently, it is not possible to rotate the connector 101 relative to the conduit to which it is connected.

Thus, the claimed structures and methods provide for an adapter that allows connection of a supply conduit to a handpiece with the adapter connected between the supply conduit and the handpiece where the adapter can be switched to assure that the handpiece is connected with the correct polarity, but that does not require any twisting of the conduit. Conventional conduits are not intended to be twisted or rotated, and rotating a conduit by 180° from its normal unrotated position would generate a torque urging it to return to its original orientation. Repeated rotation of the conduit in such a manner would weaken it and could lead to broken connections, either in the electrical conductors or other supply lines within the conduit. Such a result could have serious consequences, e.g., if a water line broke and water was allowed to come into contact with an electrical line.

In addition, most dental operations require precise positioning of the handpiece. If the supply conduit exerts a residual torque on the handpiece connected to the conduit, i.e., because the conduit has been twisted from its normal position, this residual torque can cause the handpiece to move unexpectedly when the dentist relaxes his or her grip on the handpiece. Such

a result could have serious consequences, e.g., injury to the patient and/or damage to teeth or dental work.

Bianchetti lacks at least the claimed feature of an adapter that is selectively switchable by a manual operation to move the adapter leads relative to the supply conduit. Furthermore, it would not have been obvious to modify Bianchetti to achieve this feature. Accordingly, the § 102 rejection should be withdrawn.

Claims 30, 34, and 38 are rejected under 35 USC § 103(a) over Bianchetti. This rejection is respectfully traversed.

As indicated, Bianchetti does not disclose or even suggest the claimed feature in which the adapter is selectively switchable by a manual operation to move the adapter leads relative to the supply conduit.

Moreover, there is no suggestion to modify Bianchetti to provide this feature. Accordingly, claims 30, 34 and 38 would not have been obvious over Bianchetti, and the § 103(a) rejection should be withdrawn.

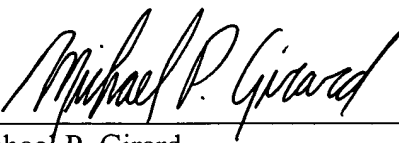
Based on the foregoing, applicant respectfully submits that the claims are directed to allowable subject matter and that the application is in condition for allowance. Should the examiner believe that anything further is necessary to place this application in better condition for allowance, the examiner is requested to contact applicant's representative by telephone.

Respectfully submitted,

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